

### **REMARKS**

Prior to this Amendment, this application contains claims 1-30. Claims 3, 4, 13, 14, 23 and 24 have been canceled without prejudice. Claims 1, 11, and 21 are hereby amended. No new matter has been added. Reconsideration is respectfully requested.

Applicant thanks Examiner LaRose for the courtesy of a personal interview with Applicant's representative, Daniel Kligler (Reg. No. 41,120) at the USPTO on March 17, 2005. At the interview, Applicant's representative pointed out that the cited art deals only with recognition of predefined characters and symbols, whereas the present invention is applicable to non-predefined, three-dimensional image features. A possible amendment along these lines was discussed.

Claims 1, 3-11, 13-21 and 23-30 were rejected under 35 U.S.C. 103(a) over Chevion et al. (U.S. Patent 5,455,875) in view of Wilber et al. (U.S. Patent 4,897,880). Claims 2, 12 and 22 were rejected under 35 U.S.C. 103(a) over Chevion in view of Wilber and further in view of Fulkerson et al. (U.S. Patent 4,695,721). Applicant has amended claims 1, 11 and 21, as discussed in the interview, in order to clarify the distinction of the present invention over the cited art.

Chevion describes a system and method for correction of OCR with display of image segments according to character data. The system presents a "carpet" of character images on the screen of a computer terminal for viewing and verification by a human operator. As noted by the Examiner, Chevion relates only to display and verification of alphanumeric characters and makes no suggestion that his method might be applied to non-character image elements.

Wilber describes a method and system for alphanumeric character recognition (abstract). The method is directed particularly to solving problems associated with hand-held optical scanners (col. 2, lines 17-43). The method is based on obtaining feature vectors from a scanned pattern and then comparing them to feature vectors of known patterns (abstract). Wilber mentions that this technique may be applied to recognize the characteristics of patterns in line images, such as electrocardiographs and speech

recordings, as well as patterns in on-line signals from a microphone or other device (col. 9, lines 14-17). In other words, Wilber implies that his method may be applied to patterns formed by two-dimensional lines, but he makes no suggestion that that it could be applied to three-dimensional image elements, or even to two-dimensional elements that are not linear in nature.

Fulkerson describes a method for surface texture recognition using multi-directional scanning. A light beam scans over a surface bearing data, such as a serial number. The reflected light is measured and processed for character recognition (col. 1, lines 37-40). The serial number may be engraved, embossed, etc., so as to have a three-dimensional quality (col. 1, lines 11-15). Fulkerson makes no suggestion, however, that his technique could be applied to images that are not predefined, essentially two-dimensional symbols.

Independent claims 1, 11 and 21 recite a method, apparatus and software for image processing, in which one or more images are analyzed so as to determine classifications of elements in the images. A plurality of the elements that have the same classification are displayed together for verification by a human operator. The claims have been amended to recite that the elements are three-dimensional elements in captured images, and are not predefined symbols or groups of predefined symbols. This added limitation is supported in the specification on page 7, lines 18-21, and by Fig. 4 and the description of Fig. 4 on page 10, lines 12-26.

The cited art neither teaches nor suggests the limitations of the amended independent claims. Chevion, Wilber and Fulkerson deal almost exclusively with recognition and verification of characters in images. Although Wilber mentions that his techniques could be applied to non-character patterns, he refers only to two-dimensional line patterns and to signals that could be represented by such patterns. Fulkerson, too, relates only to two-dimensional characters representing data, even if the characters may be sunk into or raised above a given surface. These references underline the distinction between the world of OCR, with its allied fields of symbol and line image processing, and processing of true three-dimensional images. Just as recognition algorithms for OCR are generally inapplicable to processing of three-dimensional objects that are not predefined symbols, so a person of

ordinary skill in the verification art would not have been motivated to apply Chevion's method for verifying character data to three-dimensional, non-symbol elements in captured images.

Therefore, independent claims 1, 11 and 21, as amended, are believed to be patentable over the cited art. In view of the patentability of the independent claims, dependent claims 2, 5-10, 12, 15-20, 22 and 25-30 are believed to be patentable, as well.

### **CONCLUSION**

Applicant believes the amendments and remarks presented hereinabove to be fully responsive to all of the grounds of rejection raised by the Examiner. In view of these amendments and remarks, Applicant respectfully submits that all of the claims in the present application are in order for allowance. Notice to this effect is hereby requested. The Examiner is invited to contact the undersigned at the telephone number listed below, if needed. Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 19-0089.

Respectfully submitted,



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